

**The Second
Advanced Encryption Standard (AES)
Candidate Conference**

March 22-23, 1999

Hotel Quirinale
Rome, Italy

AGENDA

Day 1 – Monday, March 22

8:00 – 9:00

- Registration, material distribution
- Coffee

9:00

Introduction - Welcome and Overview (*William Wolfowicz and Miles Smid*)

9:30

Session 1: Surveys (I) – *Tom Berson (chair)*

- NIST's Round 1 Efficiency Testing (*NIST*)
- "Implementation Experience with AES Candidate Algorithms" (*Brian Gladman*)
- "Performance Comparison of the AES Submissions" (*Bruce Schneier*)
- "AES Java™ Technology Comparisons" (*Alan Folmsbee*)

11:00

Break

11:30

Session 2: Surveys (II) – *Anatoly Lebedev (chair)*

- "Report on the AES Candidates" (*Serge Vaudenay*)
- "Instruction-level Parallelism in AES Candidates" (*Craig Clapp*)
- "A Note on Comparing the AES Candidates" (*Eli Biham*)
- NIST's Round 1 Randomness Testing (*NIST*)

13:00

Lunch (provided)

14:30

Session 3: Smart Cards (I) – Implementations – *Craig Clapp (chair)*

- "cAESar results: Implementation of Four AES Candidates on Two Smart Cards" (*François Koeune*)
- "Performance Analysis of AES candidates on the 6805 CPU core" (*Geoffrey Keating*)

15:30

Break

16:00-

Session 4: Smart Cards (II) – Related Attacks – *Craig Clapp (chair)*

17:15

- "Power Analysis of the Key Scheduling of the AES Candidates" (*Adi Shamir*)
- "Resistance Against Implementation Attacks: A Comparative Study of the AES Proposals" (*Joan Daemen*)
- "A Cautionary Note Regarding Evaluation of AES Candidates on Smart-Cards" (*Pankaj Rohatgi*)

17:30

Reception

- Cash bar and hors d'oeuvres

18:30-
20:30

Rump Session – *Jim Foti (chair)*

Day 2 – Tuesday, March 23

8:00 – 9:00

- Registration, material distribution
- Coffee

9:00 **Announcement of AES3**

9:10 **Session 5: Crypto Attacks** (*Susan Langford - chair*)

- “An Observation on the Schedule of Twofish” (*Sean Murphy*)
- “Key Schedule Weaknesses in SAFER+” (*John Kelsey*)
- “Weaknesses in LOKI97” (*Vincent Rijmen*)
- “Cryptanalysis of FROG” (*David Wagner*)
- “Cryptanalysis of MAGENTA” (*Eli Biham*)

11:00 Break

11:30 **Session 6: Algorithm Observations** (*David Aucsmith - chair*)

- “DFC Update” (*Jacques Stern*)
- “Pseudorandomness and Maximum Average of Differential Probability of Block Ciphers with SPN-Structures like E2” (*Kazukuni Kobara*)
- “On the Optimality of SAFER+ Diffusion” (*James Massey*)
- “On Differential Properties of Data-Dependent Rotations and Their Use in MARS and RC6” (*Scott Contini*)
- “New Results on the Twofish Encryption Algorithm” (*Doug Whiting*)

13:00 Lunch (provided)

14:30 **Session 7: Algorithm Submitter Rebuttals and Discussion**
(*Miles Smid – chair*)

16:00 Break

16:30 **Future Plans and Closing** (*Miles Smid*)

17:30 Adjourn